

Smart City

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Chattanooga, the #GigCity, was selected by Transportation for America to participate in a [Smart City Collaborative](#) along with Seattle, Portland, Nashville, Miami, Washington, DC, and other cities. Because of our city's strong sense of place and focus on technology and entrepreneurship, we competed successfully with dozens of others to join this great group of cities. Through the collaborations with other forward-thinking cities, CDOT is shaping its approach to the fast changing technologies that will utilize our streets, such as what's known as A/V, or [autonomous vehicles \(A/V\)](#). My usual gut instinct is that simple, practical, and people-focused ideas are always the best way to solve problems, but one thing that has caught my attention relative to driverless cars is how much safer experts say they will make our streets.



Autonomous Vehicle (Credit: [Uber](#))



Connected Vehicles (Credit: [US DOT](#))

That driverless cars will be safer might seem counter-intuitive. Who would think that removing human decision-making would ensure safer traffic? The pivotal question of course for [researchers](#) to determine is does the technology work, and can it be trusted? Currently, many organizations trust the technology so let's explore a little bit of the analytical logic of this claim.

According to a 2008 survey by the US National Highway Traffic Safety Administration, 94% of car crashes are caused by [humans just making mistakes](#). Further, an all-time high of [40,000 people died](#) in car crashes on American streets and highways in 2016. To give some local perspective, in Chattanooga, roughly the same number of people die in car crashes every year as by gunshot.

Take 40,000 for example. If you translate this death rate to air travel, let's assume that an average commercial flight in the United States carries 150 passengers. 40,000 deaths would translate to 266 plane crashes in a year, or one crash five days of every week. If you saw a plane crash in the news five days every week, would you fly?



Autonomous Delivery (Credit: [Otto](#))



A/V Shuttle (Credit: [University of Michigan](#))

We've built cities where travel by any means other than car is usually infeasible, so we do it regardless of how safe or unsafe. Some of us know how unsafe it is; most don't realize, or just accept it as an expected consequence of our transportation system. As an aside and for another post, proponents of [Vision Zero](#) believe that any death that occurs when people are just trying to go from one place to another is unacceptable. Driverless cars can most certainly do so many exciting things for our way of life; but if 94% of crashes are caused by human error, and if 40,000 people die each year in traffic crashes because of human error, doesn't that mean that development of a system that takes the human out of the equation is a simple, practical, and people-focused idea to make our city better?

This fall, CDOT will be hiring a Smart Cities Director to help us navigate these challenges and develop strategies for Chattanooga to best take advantage of A/Vs and other smart technologies. Stay tuned for more information about how we will be planning for and taking steps into Chattanooga's smart future.